

Electrak® HD with Rear Mounting Flange

Electric Linear Actuator Ideal for Automated Guided Vehicles, Mobile Equipment and Industrial Automation





Electrak® HD with Rear Mounting Flange

Electrak HD is now available with a rear mounting flange option that reduces its overall length vs. stroke length ratio. The more compact design makes it easier to fit into tight spaces and is ideal when designing different types of automation equipment, automated guided vehicles (AGVs) and lifting devices — all while maintaining the many popular advantages of Electrak HD.

Performance, Features and Control Options

There are no changes in the performance, features or control options when Electrak HD actuators are equipped with the rear mounting flange option, except for the limitation of maximum stroke to 300 mm. You can still take advantage of benefits such as standard manual override, vast onboard control options and long, maintenance-free life.

The Electrak HD Platform

Electrak HD is a state-of-the-art actuator platform with onboard electronics that eliminate the need for standalone controls. It has higher power than any other similar actuator, which opens a new, wider range of hydraulic-to-electric application conversions. Electrak HD meets the most extreme OEM component environmental acceptance tests, including IP69K, ensuring long and trouble-free operation.

| General Specifications | | | | | |
|----------------------------|---------------------------------------|--|--|--|--|
| Screw type | ball | | | | |
| Nut type | load lock ball nut | | | | |
| Manual override | yes | | | | |
| Anti-rotation | yes | | | | |
| Dynamic braking | yes ⁽¹⁾ | | | | |
| Static load holding brake | yes | | | | |
| End-of-stroke protection | internal end-of-stroke limit switches | | | | |
| Overload protection | yes | | | | |
| Temperature monitoring | yes | | | | |
| Temperature compensation | yes | | | | |
| Voltage monitoring | yes | | | | |
| Electrical connections (2) | cable(s) with flying leads | | | | |
| Compliance | CE | | | | |

⁽¹⁾ Dynamic braking is included at the ends of stroke for all Electrak HD actuators. Dynamic braking offered throughout the entire stroke length only on low-level switching and J1939 options.

⁽²⁾ There are one or two cables depending on the control option used. The cable(s) enters the actuator via a connector. The replacement of an actuator can be completed by unplugging the old actuator and plugging in the new one.

| Technical Specifications | | | | | | |
|-------------------------------------|---------------|-------------------|--|--|--|--|
| Available input voltages | [Vdc] | 12, 24 | | | | |
| Max. static load (1) | [N (lbs)] | 18000 (4050) | | | | |
| Max. dynamic load (Fx) | [N (lbs)] | 10000 (2248) | | | | |
| Max. speed @ no load/max. load | [mm/s (in/s)] | 71/58 (2.80/2.28) | | | | |
| Max. ordering stroke (S) length | [mm] | 300 | | | | |
| Restraining torque | [Nm (lbf)] | 0 | | | | |
| Operating temperature limits | [°C (F)] | -40-85 (-40-185) | | | | |
| Full load duty cycle @ 25 °C (77 °F | [%] | 25 | | | | |
| Ingress protection rating - static | | IP67 / IP69K | | | | |
| Compliances | | CE | | | | |

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Ordering

Ordering Key

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|-------|------|-----|---|---|---|---|
| HD12 | B026- | 0300 | LXX | 2 | Α | M | S |

1. Model and input voltage

HD12 = Electrak HD, 12 Vdc

HD24 = Electrak HD, 24 Vdc

2. Screw type, dynamic load capacity

B017- = ball screw, 1.7 kN (382 lbs)

B026- = ball screw, 2.6 kN (585 lbs)

B045- = ball screw, 4.5 kN (1012 lbs)

B068- = ball screw, 6.8 kN (1529 lbs)

B100- = ball screw, 10 kN (2248 lbs)

3. Ordering stroke length (1)(2)

 $0050 = 50 \text{ mm}^{(3)}$

0100 = 100 mm

0150 = 150 mm

0200 = 200 mm

0250 = 250 mm

0250 = 250 11111

0300 = 300 mm

4. Electrak Modular Control System options

EXX = Electronic Monitoring Package only

ELX = EXX + end-of-stroke indication output

EXP = EXX + analog (potentiometer) position output

EXD = EXX + digital position output

ELP = ELX + analog (potentiometer) position output

ELD = ELX + digital position output

LXX = EXX + low-level signal motor switching

LLX = LXX + end-of-stroke indication output

LXP = LXX +analog (potentiometer) position output

CNO = J1939 CAN bus + open-loop speed control

SYN = LXX + Synchronization option

5. Cable length

1 = 0.3 m long cables

2 = 1.5 m long cables

3 = 5.0 m long cables

6. Rear adapter options

A = rear mounting flange

7. Front adapter options

A = metric M16 male thread

M = cross hole for 12 mm pin

 $E = cross hole for \frac{1}{2} inch pin$

N = forked cross hole for 12 mm pin

 $F = forked cross hole for \frac{1}{2} inch pin$

P = metric M12 female thread G = inch 1/2-20 UNF-2B female thread

8. Adapter orientation

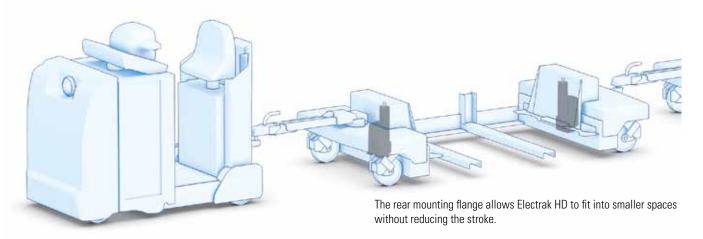
S = standard

M = 90 ° turned

9. Connection options

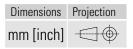
D = flying leads

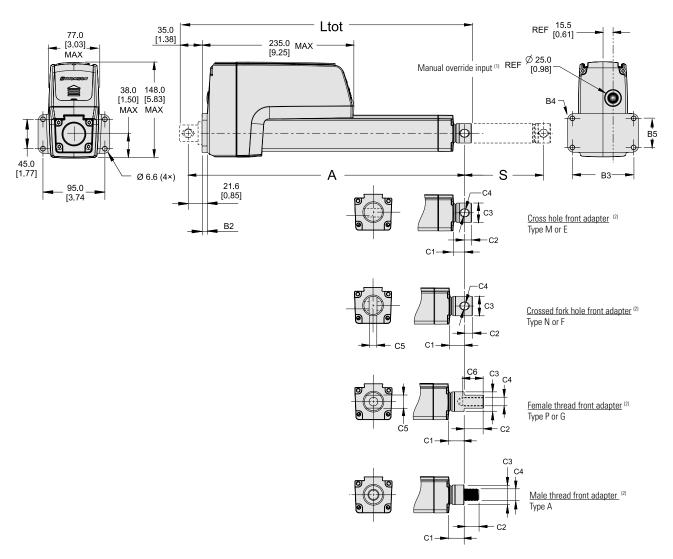
- (1) Other stroke lengths available upon request. Please contact customer support.
- (2) Max. ordering stroke for the rear mounting flange type A is 300 mm.
- (3) 50 mm stroke units will have same retracted length and envelope size as a 100 mm unit.





Dimensions





| Rear and Front Adapter Dimensions [mm] | | | | | | | | | |
|--|-------------------|----|------------------------|------|------|------|----------|---------------|-------|
| | Rear Adapter Type | | Front Adapter Types | | | | | | |
| | A (3) | | M | Е | N | F | Р | G | А |
| B1 | - | C1 | see table on next page | | | | | 16.5 | |
| B2 | 7.8 | C2 | 10.9 | 10.9 | 12.9 | 12.9 | 30.0 | 30.0 | 20.0 |
| В3 | 95.0 | C3 | see table on next page | | | | | | |
| B4 | 6.6 | C4 | 12.2 | 12.8 | 12.2 | 12.8 | M12×1.75 | 1/2-20 UNF-2B | M16×2 |
| B5 | 45.0 | C5 | - | - | 8.2 | 8.2 | 19.0 | 19.0 | - |
| | | C6 | - | - | - | - | 35.0 | 35.0 | - |

⁽¹⁾ The input hole is covered with a plastic threaded plug. When removed, a 6 mm socket can be inserted and used as a crank.

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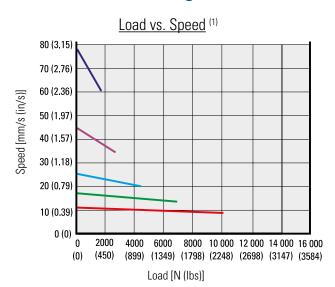
⁽²⁾ All adapters shown in the standard orientation.

⁽³⁾ Rear mounting flange type A can not be ordered with a higher maximum static load capacity than 10 kN or/and a maximum stroke of 300 mm.

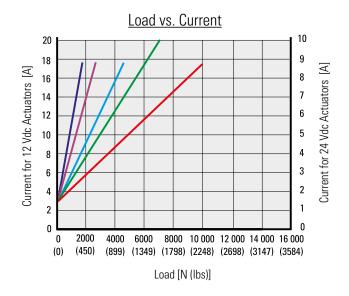
Dimensions

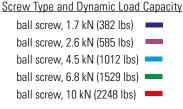
Maximum Dynamic Load and Stroke Relationships Maximum Total Length (Ltot), Ordering stroke (S) [mm] Dvnamic Retracted Length (A) Load (Fx) and Adapter 100 - 300kN (lbs.) Dimensions [mm] A + B1 + C2Ltot Α S + 150.9 + B2 + C1 C1 Type M, E 17.5 1.7 (382)Type N, F 26.5 Type P, G 23.9 C3 30.2 A + B1 + C2Ltot Α S + 150.9 + B2 + C1 C1 Type M, E 17.5 2.6 (585)Type N, F 26.5 Type P, G 23.9 C3 30.2 A + B1 + C2Ltot Α S + 150.9 + B2 + C1C1 Type M, E 17.5 4.5 (2012)Type N, F 26.5 Type P, G 23.9 C3 30.2 Ltot A + B1 + C2Α S + 150.9 + B2 + C1 C1 Type M, E 17.5 6.8 (1529)Type N, F 26.5 Type P, G 23.9 C3 30.2 A + B1 + C2Ltot Α S + 180.9 + B2 + C1C1 Type M, E 17.5 10 (2248)Type N, F 26.5 Type P, G 23.9 C3 30.2

Performance Diagrams



¹ Curves valid for all units except those with the synchronization option, where the speed at any load is 25% lower than for those without.





Note: Curves were generated at an ambient temperature of 21°C (70°F). Different ambient temperature and individual actuator characteristics can produce slightly different values.

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